Case Study

Communication: Putting in Enough Time

Joan, an undergraduate, was working hard at her first semester of research, but nobody seemed to notice. Her mentor, Dr. Simms, said Joan could come in whenever she had time available. Joan mentioned to Dr. Simms that she might come in at unusual hours as she tried to fit her part-time job and the research activities around her class and homework schedule. Joan discovered that most of the other undergraduates in the lab did not have part-time jobs to juggle.

At the start of the semester Joan was spending about ten hours per week in the lab, but after a few weeks of solo work with little feedback, her motivation declined and she started to cut her weekly hours progressively shorter. Nobody commented to her about the change, so she assumed that everything was going okay.

One day toward the end of the semester, another undergraduate approached Joan to tell her about a conversation she'd overheard at lunch between Dr. Simms and another professor in the group. According to the student, Dr. Simms was complaining that nothing seemed to have gotten done in the lab this semester. "Dr. Simms made a really snide comment about part-time jobs getting in the way of research," the other mentee said. "I think you'd better start trying to look busy."

Physics Mentoring

Case Study

Communication: The Slob

Nervis, a graduate student mentor, was frustrated because her undergraduate student, Sam, was not running successful experiments. While Sam had great enthusiasm for the project, each experiment failed because of some sloppy error—forgetting to rinse the sample with ethanol, forgetting to close a valve, or forgetting to turn down the voltage on a power supply.

After a month of discussions, and careful attempts to teach Sam habits that would compensate for his forgetfulness, Nervis was ready to give up. Nervis spoke with her adviser, Dr. Dortmund, and asked for advice, hoping that she could fix the problem and start getting useful data from Sam. Dr. Dortmund offered to work with Sam. When Sam walked into his office, Dr. Dortmund said, "I hear you're a slob in the lab. You gotta clean up your act if we're going to get any data out of you." Seeing the crushed and humiliated look on Sam's face, he quickly added, "I'm a slob too—that's why I'm in here pushing papers around and not in the lab doing the hard stuff like you guys!"